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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,746	07/21/2003	Kenji Ikeda	FSF-03511	4714
37398	7590	07/11/2006		
TAIYO CORPORATION 401 HOLLAND LANE #407 ALEXANDRIA, VA 22314				
			EXAMINER FAISON GEE, VERONICA FAYE	
			ART UNIT 1755	PAPER NUMBER

DATE MAILED: 07/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/622,746

**Applicant(s)**

IKEDA ET AL.

**Examiner**

Veronica Faison-Gee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Response to Amendment***

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

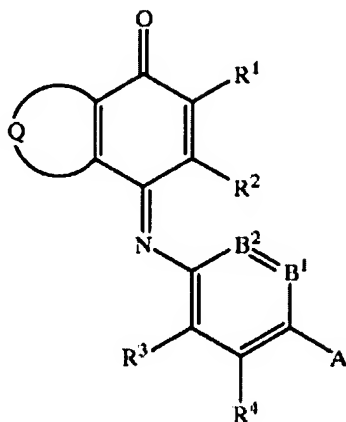
Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Kimura et al (US Patent 6,521,031)

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Kimura et al an ink jet ink comprising a coloring composition which contains an oil-soluble dye represented by the following formula (I):

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Formula (I)



wherein,  $R^1$  and  $R^2$  represent respectively independently one of a hydrogen atom, a halogen atom, an aliphatic group, an aromatic group, a heterocyclic group, a cyano group,  $-\text{OR}^{11}$ ,  $-\text{SR}^{12}$ ,  $-\text{CO}_2\text{R}^{13}$ ,  $-\text{OCOR}^{14}$ ,  $-\text{NR}^{15}\text{R}^{16}$ ,  $-\text{CONR}^{17}\text{R}^{18}$ ,  $-\text{SO}_2\text{R}^{19}$ ,  $-\text{SO}_2\text{NR}^{20}\text{R}^{21}$ ,  $-\text{NR}^{22}\text{CONR}^{23}\text{R}^{24}$ ,  $-\text{NR}^{25}\text{CO}_2\text{R}^{26}$ ,  $-\text{COR}^{27}$ ,  $-\text{NR}^{28}\text{COR}^{29}$ , and  $\text{NR}^{30}\text{SO}_2\text{R}^{31}$ ;

$R^{11}$ ,  $R^{12}$ ,  $R^{13}$ ,  $R^{14}$ ,  $R^{15}$ ,  $R^{16}$ ,  $R^{17}$ ,  $R^{18}$ ,  $R^{19}$ ,  $R^{20}$ ,  $R^{21}$ ,  $R^{22}$ ,  $R^{23}$ ,  $R^{24}$ ,  $R^{25}$ ,  $R^{26}$ ,  $R^{27}$ ,  $R^{28}$ ,  $R^{29}$ ,  $R^{30}$ , and  $R^{31}$  represent respectively independently one of a hydrogen atom, an aliphatic group, and an aromatic group;

$R^1$  and  $R^2$  may be connected to each other and form a ring;

A represents one of  $-\text{NR}^5\text{R}^6$  and a hydroxyl group;

$R^5$  and  $R^6$  represent respectively independently one of a hydrogen atom, an aliphatic group, an aromatic group, and a heterocyclic group;

$B^1$  represents one of  $=\text{C}(\text{R}^7)-$  and  $=\text{N}-$  and  $B^2$  represents one of  $-\text{C}(\text{R}^8)=$  and  $-\text{N}==$ ;

$R^3$ ,  $R^4$ ,  $R^7$  and  $R^8$  represent respectively independently one of a hydrogen atom, a halogen atom, an aliphatic group, an aromatic group, a heterocyclic group, a cyano group,  $-\text{OR}^{51}$ ,  $-\text{SR}^{52}$ ,  $-\text{CO}_2\text{R}^{53}$ ,  $-\text{OCOR}^{54}$ ,  $-\text{NR}^{55}\text{R}^{56}$ ,  $-\text{CONR}^{57}\text{R}^{58}$ ,  $-\text{SO}_2\text{R}^{59}$ ,  $-\text{SO}_2\text{NR}^{60}\text{R}^{61}$ ,  $-\text{NR}^{62}\text{CONR}^{63}\text{R}^{64}$ ,  $-\text{NR}^{65}\text{CO}_2\text{R}^{66}$ ,  $\text{COR}^{67}$ ,  $-\text{NR}^{68}\text{COR}^{69}$ , and  $\text{NR}^{70}\text{SO}_2\text{R}^{71}$ ;

$R^{51}$ ,  $R^{52}$ ,  $R^{53}$ ,  $R^{54}$ ,  $R^{55}$ ,  $R^{56}$ ,  $R^{57}$ ,  $R^{58}$ ,  $R^{59}$ ,  $R^{60}$ ,  $R^{61}$ ,  $R^{62}$ ,  $R^{63}$ ,  $R^{64}$ ,  $R^{65}$ ,  $R^{66}$ ,  $R^{67}$ ,  $R^{68}$ ,  $R^{69}$ ,  $R^{70}$ , and  $R^{71}$  represent respectively independently one of a hydrogen atom, an aliphatic group, and an aromatic group;

$R^3$  and  $R^4$ ,  $R^4$  and  $R^5$ ,  $R^5$  and  $R^6$ ,  $R^6$  and  $R^7$ , and  $R^7$  and  $R^8$  may be combined with each other and form rings; and

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**Q includes at least one nitrogen atom and, together with a carbon atom to be combined, represents an atom group which is required to form a nitrogen-containing heterocyclic ring having a five-membered ring or more.**

The reference further teaches that the liquid medium may comprise water and a water miscible organic solvent, to which, as occasion demands, an additive such as surface active agent, a dry-preventing agent, a stabilizer, an antiseptic (abstract and col. 3 line 15+). The oil-soluble polymer includes vinyl polymers and condensed polymers such as polyurethane, polyester, polyamide, polyurea and polycarbonate. The polymer may be nonionic and ionic polymer including carboxylic acid and sulfonic acid (col. 27 line 18-col. 28 line 63). The molecular weight of the oil-soluble polymer is usually from 1,000 to 200,000. The coloring composition can be produced by dispersing the oil-soluble dye and the oil-soluble polymer in the form of coloring particulates, by a production process of co-emulsification dispersion process, which can be placed into a water-based solvent (col. 34 lines 18-43). The oil-soluble polymer in the coloring composition is present in the amount of 10 to 1000 mass parts of the oil-soluble dye (col. 35 lines 43-53). The organic solvent is present in the amount of 10 to 2000 mass parts of the oil-soluble polymer (col. 36 lines 1-9). The additives include a neutralizing agent, a dispersant and a dispersion stabilizer (col. 36 lines 27-28). The amount of the dispersion, dispersion stabilizer and surfactant added is 0 to 20 percent by mass (col. 36 lines 66-67). The surfactant may be present in the composition in the amount of 0.5 percent or more (col. 53 line 62-67). The composition further comprises a high boiling point organic solvent in the amount of 1 to 1000 mass parts relative to the oil-soluble dye. The coloring particulates in the coloring composition are present in the amount of 1 to 45 percent and

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have a particle size from 1 to 500 nm (col. 37 lines 12-18). The composition may also contain alcohols including isopropyl alcohol, n-butyl alcohol and sec-butyl alcohol, ketones and ethers (col. 50 lines 28-40). The surface tension of the ink composition from 20 to 60 mN/m and viscosity is 30 mPa•s or less (col. 54 lines 7-10). The ink composition may be used in an ink jet recording method may be charge control, drop on demand, acoustic or piezo type recording method (col. 56 lines 51-61). The substrate on which in ink composition may be printed on include plain paper, resin-coated paper and film (col. 54 line 19+). The composition as taught by Kimura et al appears to anticipate the claimed invention.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

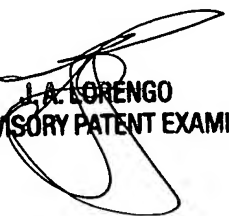
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Veronica Faison-Gee whose telephone number is 571-272-1366. The examiner can normally be reached on Monday-Thursday and alternate Fridays 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

vfg  
6-26-06

  
**J. A. LORENGO**  
**SUPERVISORY PATENT EXAMINER**